

**PLACER COUNTY
AIR POLLUTION CONTROL DISTRICT**

STAFF REPORT

RULE 233

BIOMASS BOILERS

PROPOSED AMENDMENTS

June 14, 2012

June 14, 2012

SUMMARY

Rule 233, Biomass Boilers, first adopted on October 6, 1994, was last amended on December 10, 2009. The amendment was adopted by the California Air Resources Board (CARB) as a State Implementation Plan (SIP) revision and was forwarded to U.S. EPA for approval by CARB on May 17, 2009. A formal limited approval and limited disapproval of the amended Rule was issued by EPA in the Federal Registry, Volume 77, Number 12, on January 10, 2012. See attachment #1.

The limited approval means that EPA has determined that overall the rule improves the SIP and is largely consistent with the relevant Federal Clean Air Act (CAA) requirements but simultaneously issued a limited disapproval because it was their opinion that the NO_x emission limits in Section 301 do not represent current Reasonably Available Control Technology (RACT).

The District proposes to amend Rule 233, Biomass Boilers, by adding an additional NO_x limitation of 68 ppmv corrected to 12% CO₂ twenty-four hour block average. This is being done solely to satisfy the limited disapproval by EPA and obtain approval into the State Implementation Plan (SIP).

BACKGROUND

The Federal Clean Air Act, as amended in 1990, required adoption of source specific regulations for major sources of nitrogen oxides (NO_x) pursuant to Sections 182(b)(2)(C) and 182 (f). These sections required the adoption of Reasonable Available Control Technology (RACT) rules. In addition, the California Clean Air Act transport mitigation provisions required the adoption of Best Available Retrofit Control Technology (BARCT) for sources compromising 75% of the actual NO_x emission inventory in the District.

Biomass boilers were affected by this requirement. There are currently two facilities with biomass boilers in Placer County. Rio Bravo-Rocklin operates a fluidized bed biomass boiler and Sierra Pacific Industries which operates a stoker biomass boiler.

Rule 233, Biomass Boilers, was originally adopted on October 6, 1994 and subsequently approved in the California State Implementation Plan (SIP) in 1996.

The rule originally limited NO_x emission to the least stringent of 115 ppmv corrected to 12% CO₂ or 50% of the uncontrolled emission concentration in the boiler exhaust. The 115 ppmv limitation corresponded to the limitation in Sierra Pacific Industries Prevention of Significant Deterioration (PSD) permit issued by the U.S. Environmental Protection Agency (EPA). This emission limitation reflected a determination by the U.S. EPA that the selective non-catalytic reduction system using ammonia injection to control NO_x constituted Best Available Control Technology (BACT).

At that time, this control technology and limitation was considered to represent RACT and BARCT which are less stringent requirements than BACT.

June 14, 2012

NO_x emissions are measured by a continuous emission monitoring system (CEMS) installed in the stack. The concentration is corrected or normalized to 12% CO₂ so that one boiler may be compared to another. It is also corrected so that an operation cannot introduce additional outside air into the boiler solely to lower the concentration. The correction is a simple calculation as follows:

$$\text{NO}_x \text{ corrected to 12\% CO}_2 = \text{NO}_x \text{ measured} \times 12\% / \text{CO}_2 \% \text{ measured}$$

The District amended Rule 233 to address startup and shutdown conditions. The October 11, 2007, rule amendment was forwarded to the California Air Resources Board (CARB) for approval into the California State Implementation Plan (SIP). This was approved by CARB and forwarded to the U.S. EPA for approval.

U.S. EPA declined to approve that amendment into the SIP saying it was inconsistent with federal regulation and policy. Their response was contained in an email in Attachment #1. The main objections were in two areas:

1. The 115 ppm limit for NO_x does not apply during startup and shutdown. Instead mass emission limits in the Permit to Operate would apply. Although these limits were already in place in the both the District Permit to Operate and federal Title V, EPA requested that the limitations be listed in the Rule itself.
2. The amendment must provide a demonstration that both the length of time of the startups and shutdown and the emissions were minimized as much as technologically feasible.

In acknowledgement of U.S. EPA intention to disapprove the October 11, 2007, amendment, the District requested the withdrawal of the amendment from SIP consideration in a letter dated October 14, 2008.

The District subsequently proposed the following changes to address the EPA's concerns. These changes were discussed at length with U.S. EPA.

- A startup was defined as the period of time a unit is heated to the normal operating temperature, as specified by the manufacturer. A normal startup shall not exceed 24 hours. A curing startup shall not exceed 96 hours.
- Section 301, Limitations, which addresses limitations during normal operation, was changed to add a carbon monoxide (CO) for each type of boiler. These limitations currently exist in the Permits to Operate for each facility.

June 14, 2012

TABLE 1 - NO_x and CO Emission Limitations		
Type of Boiler	NO _x	CO
Circulating Fluidized Bed	115 ppmv corrected to 12% CO ₂ (3 hour rolling average)	400 ppmv corrected to 12% CO ₂ (3 hour rolling average)
Stoker	115 ppmv corrected to 12% CO ₂ (3 hour rolling average)	1000 ppmv corrected to 12% CO ₂ (3 hour rolling average)

- To address EPA's concerns in effort to make the amendment SIP approvable, this rule amendment included the mass emission limitations in pounds per hour as follows in Section 302, Startup and Shutdown Provisions.

Table 2 Startup and Shutdown Emission Limitations		
Type of Boiler	NO _x	CO
Circulating Fluidized Bed	35 pounds per hour (24 hour block average)	56 pounds per hour (24 hour block average)
	35 pounds per hour (72 hour block average during curing of refractory)	56 pounds per hour (72 hour block average during curing of refractory)
Stoker	37.6 pounds per hour (3 hour rolling average)	170 pounds per hour (3 hour rolling average)

These proposed rule amendments were discussed at length with EPA staff. General agreement was reached that the Rule would be SIP approvable. EPA staff never identified an issue with the ppm NO_x limitation. The proposed rule was then adopted by the District Board on December 10, 2009.

Rule 233 was submitted to the California Air Resources Board (CARB) for approval into the State Implementation Plan (SIP). CARB agreed and forwarded to EPA for final approval into the SIP on May 17, 2010.

In April of 2011 EPA contacted the District and indicated the agency had planned on approving Rule into the SIP but there had been objections from an environmental group, Earth Justice, to the SIP approval of San Joaquin Valley Unified Air Pollution Control District's (SJVUAPCD) rule which has similar NO_x limits for biomass boilers. As a result, EPA had reconsidered its position and issued a limited approval and limited disapproval to SJVUAPCD. EPA indicated its intent to issue a limited approval and limited disapproval for Rule 233 unless the District could provide a counter argument that our existing rule NO_x limitation met current RACT. The Technical Support Document for EPA's Notice of Rulemaking was provided to the District by EPA.

A formal limited approval and limited disapproval of District Rule 233 was issued by EPA in the Federal Registry, Volume 77, Number 12, on January 10, 2012. (See Attachment #1). EPA indicates the disapproval was based on their determination that the NOx limitation of 115 parts per million by volume (ppmv) on a three-hour rolling average was not low enough to be considered current RACT. This was based on the fact that Yolo-Solano AQMD has adopted a rule which limits NOx emissions from a biomass boiler to 90 ppmv corrected to 3% O2 on a twenty-four hour average. Also, source test results show that the two regulated facilities in Placer County can achieve lower emission rates. There was no discussion of the fact that currently the Rule 233 limit requires a significantly shorter time period (three-hour rolling average). The shorter the averaging period the more stringent a limit becomes.

EPAs technical support document (see Attachment #2) concludes that 90 ppmv corrected to 3% O2 twenty-four hour block average is approximately equal to 68 ppmv corrected to 12% CO2 twenty-four hour block average. EPA staff indicates the calculation was made using the F Factors in EPA Test Method 19 along with the equations in EPA Test Method 3B. Note, calculation by the District staff found that 90 ppmv corrected to 3% O2 is approximately 64 ppmv corrected to 12% CO2. The staff report prepared by Yolo-Solano AQMD when adopting their biomass rule indicates 90 ppmv corrected to 3% O2 is approximately 70 ppmv corrected to 12% CO2. While the District was considering its response, SJVUAPCD revised its biomass boiler rule to 90 ppmv corrected to 3% O2 twenty-four hour block average in December of 2011.

As mentioned previously, the District proposes to amend Rule 233, Biomass Boilers, by adding an additional NOx limitation of 68 ppmv corrected to 12% CO2 twenty-four hour block average. This limit is the same as was recommended in the EPA technical support document, and between the values independently determined by District staff and Yolo-Solano staff.

DISCUSSION OF PROPOSED RULE AMENDMENT

The District is required to revise Rule 233 and gain EPA SIP approval within eighteen (18) months, by July 20, 2013, or sanctions will be imposed.

The District proposes to amend Rule 233, Biomass Boilers, by adding an additional NOx limitation of 68 ppmv corrected to 12% CO2 twenty-four hour block average. This is considered equivalent to and consistent with the NOx limitations for biomass boilers in other District Rules. This amendment is being proposed to satisfy the limited disapproval by EPA and obtain SIP approval. There will be no emission reductions from this amendment because the affected facilities have installed and are currently operating the ammonia injection air pollution control equipment needed to meet this limit.

The District proposes that the added NOx limit become effective on January 1, 2013 so that sources will have an opportunity to program CEMS software to record and report on NOx twenty-four hour averages. This effective date is before the date when EPA's sanctions might be considered, July 20, 2013. During this time the previously existing emission limits will continue to be effective.

June 14, 2012

Applicability:

No Change.

Exemptions:

Removed Section 104, Exemption for Rule 232, Biomass Suspension Boilers. The District recently removed Rule 232 from the District Rules and Regulations because there are no longer any boilers of this type in Placer County and the Rule had not been SIP approved.

Definitions:

Added a definition of Block 24- Hour Average to clarify the newly added standard which is measured on this basis.

Standards:

Added an additional NOx limitation of 68 ppmv corrected to 12% CO2 twenty-four hour block average in addition to the existing limitation of 115 ppmv corrected to 12% CO2 three-hour rolling average.

Administrative:

There are no changes to the Administrative Requirements.

Monitoring and Records:

Added references to require monitoring and recording the twenty-four hour block average.

FINDINGS

FINDING	DEFINITION	REFERENCE
Authority	The District is permitted or required to adopt, amend, or repeal the rule by a provision of law or a state or federal regulation.	California Health and Safety Code, Section 40702 and Section 41010; 1990 Federal Clean Air Act, Section 110(a) (2) (H) and Section 182(d).
Necessity	The District has demonstrated that a need exists for the rule, or for its amendment or repeal.	It is necessary for the District to adopt this rule in order to fulfill the requirements of the Federal Clean Air Act Amendments of 1990 and seek SIP approval.
Clarity	The rule is written or displayed so that its meaning can be easily understood by the persons directly affected by it.	There is no indication at this time that the rule is not written in such a manner that the person affected by the rule can easily understand it.
Consistency	The rule is in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, or state or federal regulations.	The District has found that the rule is consistent with existing state and federal guidelines.

June 14, 2012

Non-duplication	The rule does not impose the same requirements as an existing state or federal regulation, unless the District finds that the requirements are necessary or proper to execute the powers and duties granted to, and imposed upon the District.	NSPS, Subpart Da and Db apply to these boilers but the requirements are less stringent than Rule 233.
Reference	Any statute, court decision, or other provision of law that the District implements, interprets, or makes specific by adopting, amending, or repealing the rule. An example of this would be the 1988 EPA State Implementation Plan call to revise District rules.	This rule is being proposed because of the requirements of the Federal Clean Air Act Amendments of 1990.

SUMMARY

This amendment has been proposed to address the limited disapproval from U.S. EPA and to make Rule 233, Biomass Boilers, SIP approvable.

Attachments(s) #1: Federal Registry Notice
#2: EPA Technical Support Document for EPA's Notice
#3: Calculation of Equivalent Correction from % Oxygen vs. % Carbon Dioxide

ATTACHMENT #1

SUBJECT:

Federal Registry Notice

TABLE TO § 100.501—Continued
 [All coordinates listed in the Table to § 100.501 reference Datum NAD 1983.]

Number	Date	Event	Sponsor	Location
3	September—3rd and or 4th or last Sunday.	Crystal Coast Super Boat Grand Prix.	Super Boat International Productions Inc.	The waters of Bogue Sound, adjacent to Morehead City, NC, from the southern tip of Sugar Loaf Island approximate position latitude 34°42'55" N, longitude 076°42'48" W, thence westerly to Morehead City Channel Day beacon 7 (LLNR 38620), thence southwest along the channel line to Bogue Sound Light 4 (LLNR 38770), thence southerly to Causeway Channel Day beacon 2 (LLNR 38720), thence southeasterly to Money Island Day beacon 1 (LLNR 38645), thence easterly to Eight and One Half Marina Day beacon 2 (LLNR 38685), thence easterly to the western most shoreline of Brant Island approximate position latitude 34°42'36" N, longitude 076°42'11" W, thence northeasterly along the shoreline to Tombstone Point approximate position latitude 34°42'14" N, longitude 076°41'20" W, thence southeasterly to the east end of the pier at Coast Guard Sector North Carolina approximate position latitude 34°42'00" N, longitude 076°40'52" W, thence easterly to Morehead City Channel Buoy 20 (LLNR 29427), thence northerly to Beaufort Harbor Channel LT 1BH (LLNR 34810), thence northwesterly to the southern tip of Radio Island approximate position latitude 34°42'22" N, longitude 076°40'52" W, thence northerly along the shoreline to approximate position latitude 34°43'00" N, longitude 076°41'25" W, thence westerly to the North Carolina State Port Facility, thence westerly along the State Port to the southwest corner approximate position latitude 34°42'55" N, longitude 076°42'12" W, thence westerly to the southern tip of Sugar Loaf Island the point of origin.
4	September—3rd, 4th or last Saturday; October—last Saturday; November—1st and or 2nd Saturday.	Wilmington YMCA Triathlon.	Wilmington, NC, YMCA	The waters of, and adjacent to, Wrightsville Channel, from Wrightsville Channel Day beacon 14 (LLNR 28040), located at 34°12'18" N, longitude 077°48'10" W, to Wrightsville Channel Day beacon 25 (LLNR 28080), located at 34°12'51" N, longitude 77°48'53" W.

Dated: December 29, 2011.
 William D. Lee,
 Rear Admiral, U.S. Coast Guard, Commander,
 Fifth Coast Guard District.
 [FR Doc. 2012-916 Filed 1-18-12; 8:45 am]
 BILLING CODE 9110-04-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R06-OAR-2008-0638; FRL-9613-7]

Approval and Disapproval and Promulgation of Implementation Plans; Texas; Infrastructure and Interstate Transport Requirements for the 1997 Ozone and the 1997 and 2006 PM_{2.5} NAAQS

Correction

In Federal Register correction rule document C1-2011-33253 appearing on page 1873 in the issue of Thursday, January 12, 2012, the correction should have read as follows:

§ 52.2270 [Corrected]

■ 1. On page 81392, in § 52.2270(c), in the table appearing at the bottom of the page, in the entry under the column

titled "PA approval date", "12/28/2012" should read "2/28/2011".

■ 2. On page 81393, in § 52.2270(c) and (e), in both tables appearing on this page, in the two entries under the columns titled "EPA approval date", "12/28/2012" should read "12/28/2011".

[FR Doc. C2-2011-33253 Filed 1-18-12; 8:45 am]
 BILLING CODE 1505-01-D

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R09-OAR-2011-0536; FRL-9618-2]

Revisions to the California State Implementation Plan, Placer County Air Pollution Control District

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: EPA is finalizing a limited approval and limited disapproval of revisions to the Placer County Air Pollution Control District (PCAPCD) portion of the California State Implementation Plan (SIP). This action was proposed in the *Federal Register* on September 6, 2011 and concerns oxides of nitrogen (NO_x) emissions from biomass fuel-fired boilers. Under authority of the Clean Air Act as amended in 1990 (CAA or the Act), this action simultaneously approves a local rule that regulates these emission sources and directs California to correct rule deficiencies.

DATES: *Effective Date:* This rule is effective on *February 21, 2012*.

ADDRESSES: EPA has established docket number EPA-R09-OAR-2011-0536 for this action. Generally, documents in the docket for this action are available electronically at <http://www.regulations.gov> or in hard copy at EPA Region IX, 75 Hawthorne Street, San Francisco, California. While all documents in the docket are listed at <http://www.regulations.gov>, some information may be publicly available only at the hard copy location (e.g., copyrighted material, large maps, multi-volume reports), and some may not be available in either location (e.g., confidential business information (CBI)). To inspect the hard copy materials, please schedule an appointment during normal business hours with the contact listed in the **FOR FURTHER INFORMATION CONTACT** section.

FOR FURTHER INFORMATION CONTACT:

Idalia Perez, EPA Region IX, (415) 972-3248, perez.idalia@epa.gov.

SUPPLEMENTARY INFORMATION:

Throughout this document, "we," "us" and "our" refer to EPA.

Table of Contents

- I. Proposed Action
- II. Public Comments and EPA Responses
- III. EPA Action
- IV. Statutory and Executive Order Reviews.

I. Proposed Action

On September 6, 2011 (76 FR 54993), EPA proposed a limited approval and limited disapproval of the following rule that was submitted for incorporation into the California SIP.

Local agency	Rule #	Rule title	Amended	Submitted
PCAPCD	233	Biomass Boilers	12/10/09	05/17/10

We proposed a limited approval because we determined that this rule improves the SIP and is largely consistent with the relevant CAA requirements. We simultaneously proposed a limited disapproval because some rule provisions conflict with section 110 and part D of the Act. Specifically, PCAPCD did not demonstrate that the NO_x emission limits for biomass boilers found in Section 301 implement RACT.

Our proposed action contains more information on the basis for this rulemaking and on our evaluation of the submittal.

II. Public Comments and EPA Responses

EPA's proposed action provided a 30-day public comment period. During this period, we received no comments.

III. EPA Action

No comments were submitted that change our assessment of the rule as described in our proposed action. Therefore, as authorized in sections 110(k)(3) and 301(a) of the Act, EPA is finalizing a limited approval of the submitted rule. This action incorporates the submitted rule into the California SIP, including those provisions identified as deficient. As authorized under section 110(k)(3), EPA is simultaneously finalizing a limited disapproval of the rule. As a result, sanctions will be imposed unless EPA approves subsequent SIP revisions that correct the rule deficiencies within 18 months of the effective date of this action. These sanctions will be imposed

under section 179 of the Act according to 40 CFR 52.31. In addition, EPA must promulgate a federal implementation plan (FIP) under section 110(c) unless we approve subsequent SIP revisions that correct the rule deficiencies within 24 months. Note that the submitted rule has been adopted by the PCAPCD, and EPA's final limited disapproval does not prevent the local agency from enforcing it. The limited disapproval also does not prevent any portion of the rule from being incorporated by reference into the federally enforceable SIP as discussed in a July 9, 1992 EPA memo found at: <http://www.epa.gov/nsr/ttnnsr01/gen/pdf/memo-s.pdf>.

IV. Statutory and Executive Order Reviews**A. Executive Order 12866, Regulatory Planning and Review**

The Office of Management and Budget (OMB) has exempted this regulatory action from Executive Order 12866, entitled "Regulatory Planning and Review."

B. Paperwork Reduction Act

This action does not impose an information collection burden under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* Burden is defined at 5 CFR 1320.3(b).

C. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) generally requires an agency to conduct a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements unless the

agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small not-for-profit enterprises, and small governmental jurisdictions.

This rule will not have a significant impact on a substantial number of small entities because SIP approvals and limited approvals/limited disapprovals under section 110 and subchapter I, part D of the Clean Air Act do not create any new requirements but simply approve requirements that the State is already imposing. Therefore, because this limited approval/limited disapproval action does not create any new requirements, I certify that this action will not have a significant economic impact on a substantial number of small entities.

Moreover, due to the nature of the Federal-State relationship under the Clean Air Act, preparation of flexibility analysis would constitute Federal inquiry into the economic reasonableness of State action. The Clean Air Act forbids EPA to base its actions concerning SIPs on such grounds. *Union Electric Co., v. U.S. EPA*, 427 U.S. 246, 255-66 (1976); 42 U.S.C. 7410(a)(2).

D. Unfunded Mandates Reform Act

Under sections 202 of the Unfunded Mandates Reform Act of 1995 ("Unfunded Mandates Act"), signed into law on March 22, 1995, EPA must prepare a budgetary impact statement to accompany any proposed or final rule that includes a Federal mandate that may result in estimated costs to State,

local, or tribal governments in the aggregate; or to the private sector, of \$100 million or more. Under section 205, EPA must select the most cost-effective and least burdensome alternative that achieves the objectives of the rule and is consistent with statutory requirements. Section 203 requires EPA to establish a plan for informing and advising any small governments that may be significantly or uniquely impacted by the rule.

EPA has determined that the limited approval/limited disapproval action promulgated does not include a Federal mandate that may result in estimated costs of \$100 million or more to either State, local, or tribal governments in the aggregate, or to the private sector. This Federal action approves pre-existing requirements under State or local law, and imposes no new requirements. Accordingly, no additional costs to State, local, or tribal governments, or to the private sector, result from this action.

E. Executive Order 13132, Federalism

Federalism (64 FR 43255, August 10, 1999) revokes and replaces Executive Orders 12612 (*Federalism*) and 12875 (*Enhancing the Intergovernmental Partnership*). Executive Order 13132 requires EPA to develop an accountable process to ensure “meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications.” “Policies that have federalism implications” is defined in the Executive Order to include regulations that have “substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.” Under Executive Order 13132, EPA may not issue a regulation that has federalism implications, that imposes substantial direct compliance costs, and that is not required by statute, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by State and local governments, or EPA consults with State and local officials early in the process of developing the proposed regulation. EPA also may not issue a regulation that has federalism implications and that preempts State law unless the Agency consults with State and local officials early in the process of developing the proposed regulation.

This rule will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the

distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132, because it merely approves a State rule implementing a Federal standard, and does not alter the relationship or the distribution of power and responsibilities established in the Clean Air Act. Thus, the requirements of section 6 of the Executive Order do not apply to this rule.

F. Executive Order 13175, Coordination With Indian Tribal Governments

Executive Order 13175, entitled “Consultation and Coordination with Indian Tribal Governments” (65 FR 67249, November 9, 2000), requires EPA to develop an accountable process to ensure “meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications.” This final rule does not have tribal implications, as specified in Executive Order 13175. It will not have substantial direct effects on tribal governments, on the relationship between the Federal government and Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes. Thus, Executive Order 13175 does not apply to this rule.

G. Executive Order 13045, Protection of Children From Environmental Health Risks and Safety Risks

EPA interprets Executive Order 13045 (62 FR 19885, April 23, 1997) as applying only to those regulatory actions that concern health or safety risks, such that the analysis required under section 5-501 of the Executive Order has the potential to influence the regulation. This rule is not subject to Executive Order 13045, because it approves a State rule implementing a Federal standard.

H. Executive Order 13211, Actions That Significantly Affect Energy Supply, Distribution, or Use

This rule is not subject to Executive Order 13211, “Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use” (66 FR 28355, May 22, 2001) because it is not a significant regulatory action under Executive Order 12866.

I. National Technology Transfer and Advancement Act

Section 12 of the National Technology Transfer and Advancement Act (NTTAA) of 1995 requires Federal agencies to evaluate existing technical standards when developing a new regulation. To comply with NTTAA,

EPA must consider and use “voluntary consensus standards” (VCS) if available and applicable when developing programs and policies unless doing so would be inconsistent with applicable law or otherwise impractical.

The EPA believes that VCS are inapplicable to this action. Today’s action does not require the public to perform activities conducive to the use of VCS.

J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Population

Executive Order (EO) 12898 (59 FR 7629 (Feb. 16, 1994)) establishes federal executive policy on environmental justice. Its main provision directs federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States.

EPA lacks the discretionary authority to address environmental justice in this rulemaking.

K. Congressional Review Act

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the *Federal Register*. A major rule cannot take effect until 60 days after it is published in the *Federal Register*. This action is not a “major rule” as defined by 5 U.S.C. 804(2). This rule will be effective on *February 21, 2012*.

L. Petitions for Judicial Review

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by *March 19, 2012*. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and

shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements (see section 307(b)(2)).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Ozone, Particulate matter, Reporting and recordkeeping requirements.

Dated: January 4, 2012.

Jared Blumenfeld,

Regional Administrator, Region IX.

Part 52, Chapter I, Title 40 of the Code of Federal Regulations is amended as follows:

PART 52—[AMENDED]

■ 1. The authority citation for Part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart F—California

■ 2. Section 52.220, is amended by adding paragraphs (c)(379)(i)(D) to read as follows:

§ 52.220 Identification of plan.

* * * * *

(c) * * *

(379) * * *

(i) * * *

(D) Placer County Air Pollution Control District

(1) Rule 233, "Biomass Boilers," amended on December 10, 2009.

* * * * *

[FR Doc. 2012-841 Filed 1-18-12; 8:45 am]

BILLING CODE 6560-50-P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

44 CFR Part 64

[Docket ID FEMA-2011-0002; Internal Agency Docket No. FEMA-8213]

Suspension of Community Eligibility

AGENCY: Federal Emergency Management Agency, DHS.

ACTION: Final rule.

SUMMARY: This rule identifies communities where the sale of flood insurance has been authorized under the National Flood Insurance Program (NFIP) that are scheduled for suspension on the effective dates listed

within this rule because of noncompliance with the floodplain management requirements of the program. If the Federal Emergency Management Agency (FEMA) receives documentation that the community has adopted the required floodplain management measures prior to the effective suspension date given in this rule, the suspension will not occur and a notice of this will be provided by publication in the *Federal Register* on a subsequent date.

DATES: *Effective Dates:* The effective date of each community's scheduled suspension is the third date ("Susp.") listed in the third column of the following tables.

FOR FURTHER INFORMATION CONTACT: If you want to determine whether a particular community was suspended on the suspension date or for further information, contact David Stearrett, Mitigation Directorate, Federal Emergency Management Agency, 500 C Street SW., Washington, DC 20472, (202) 646-2953.

SUPPLEMENTARY INFORMATION: The NFIP enables property owners to purchase Federal flood insurance that is not otherwise generally available from private insurers. In return, communities agree to adopt and administer local floodplain management aimed at protecting lives and new construction from future flooding. Section 1315 of the National Flood Insurance Act of 1968, as amended, 42 U.S.C. 4022, prohibits the sale of NFIP flood insurance unless an appropriate public body adopts adequate floodplain management measures with effective enforcement measures. The communities listed in this document no longer meet that statutory requirement for compliance with program regulations, 44 CFR part 59. Accordingly, the communities will be suspended on the effective date in the third column. As of that date, flood insurance will no longer be available in the community. We recognize that some of these communities may adopt and submit the required documentation of legally enforceable floodplain management measures after this rule is published but prior to the actual suspension date. These communities will not be suspended and will continue their eligibility for the sale of insurance. A notice withdrawing the suspension of the communities will be published in the *Federal Register*.

In addition, FEMA publishes a Flood Insurance Rate Map (FIRM) that identifies the Special Flood Hazard Areas (SFHAs) in these communities. The date of the FIRM, if one has been

published, is indicated in the fourth column of the table. No direct Federal financial assistance (except assistance pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act not in connection with a flood) may be provided for construction or acquisition of buildings in identified SFHAs for communities not participating in the NFIP and identified for more than a year on FEMA's initial FIRM for the community as having flood-prone areas (section 202(a) of the Flood Disaster Protection Act of 1973, 42 U.S.C. 4106(a), as amended). This prohibition against certain types of Federal assistance becomes effective for the communities listed on the date shown in the last column. The Administrator finds that notice and public comment under 5 U.S.C. 553(b) are impracticable and unnecessary because communities listed in this final rule have been adequately notified.

Each community receives 6-month, 90-day, and 30-day notification letters addressed to the Chief Executive Officer stating that the community will be suspended unless the required floodplain management measures are met prior to the effective suspension date. Since these notifications were made, this final rule may take effect within less than 30 days.

National Environmental Policy Act. This rule is categorically excluded from the requirements of 44 CFR part 10, Environmental Considerations. No environmental impact assessment has been prepared.

Regulatory Flexibility Act. The Administrator has determined that this rule is exempt from the requirements of the Regulatory Flexibility Act because the National Flood Insurance Act of 1968, as amended, 42 U.S.C. 4022, prohibits flood insurance coverage unless an appropriate public body adopts adequate floodplain management measures with effective enforcement measures. The communities listed no longer comply with the statutory requirements, and after the effective date, flood insurance will no longer be available in the communities unless remedial action takes place.

Regulatory Classification. This final rule is not a significant regulatory action under the criteria of section 3(f) of Executive Order 12866 of September 30, 1993, Regulatory Planning and Review, 58 FR 51735.

Executive Order 13132, Federalism. This rule involves no policies that have federalism implications under Executive Order 13132.

Executive Order 12988, Civil Justice Reform. This rule meets the applicable standards of Executive Order 12988.

ATTACHMENT #2

SUBJECT:

EPA Technical Support Document

United States Environmental Protection Agency, Region 9

Air Division

Technical Support Document

for

EPA's Notice of Rulemaking

for the

California State Implementation Plan

Placer County Air Pollution Control District's

Rule 233, Biomass Boilers

Prepared by: Idalia Perez

July 2011

Placer County Air Pollution Control District (PCAPCD)

Submitted Rule

PCAPCD Rule 233, Biomass Boilers:

- Adopted: December 10, 2009
- Submitted: May 17, 2010
- Determined complete: June 8, 2010

Previous Rule Submittals

There are no outstanding submittals of Rule 233. PCAPCD adopted a previous version of Rule 233 on October 11, 2007 and it was submitted to EPA on March 7, 2008. This rule was officially withdrawn on November 5, 2008.

SIP-Approved Rule

- Adopted: October 6, 1994
- Approved by EPA: April 30, 1996 (61 FR 18959)

Rule Summary

Rule 233 regulates emissions of oxides of nitrogen (NOx) and carbon monoxide (CO) from biomass boilers and steam generators that have a heat input rating of less than 500 million British Thermal Units per hour (MMBtu) and a potential to emit 25 tons or more of NOx per year.

Changes to the rule

The District amended Rule 233 on October 11, 2007 to address concerns from industry.

Regulated facilities were having difficulty meeting the parts per million (ppm) NOx limits during start-up and shutdown due to the carbon dioxide (CO₂) correction in this form of the standard.

Facilities were able to meet their permitted pounds per hour (lb/hour) NOx limit during the same periods of time because this form of the emission limit does not have a CO₂ correction. The NOx limits in the rule are shown in the following table.

Type of Boiler	Limits during normal operations (ppm)	Approximate limits during normal operations (lb/hour) ¹	Limits during startup shutdown (lb/hour)
Circulating Fluidized Bed	115	95.1	35
Stoker	115	59.7	37.6

The main changes to Rule 233 to address the facilities' concerns were changes in the definitions of start-up, shutdown and the replacement of the existing ppm limits with lb/hour limits during these periods. Additionally, a 400 ppm or 1000 ppm limit for CO was added (depending on boiler type), the option for 50% reduction of NOx emissions from uncontrolled levels as the limit for NOx was eliminated and the method for determining the HHV for fuel was changed from ASTM D 2015-85 to ASTM E711.

¹ These values are not in the text of the rule, but were obtained from an email sent by John Finnell to Idalia Perez on 4/8/2011. They are calculated based on the respective boiler capacities of the two facilities currently regulated under Rule 233.

Other changes to the rule include added definitions and recordkeeping requirements that improve rule clarity and enforceability.

Effects on Emissions

The changes made to Rule 233 have no net effect on emissions. The removal of the 115 ppm NO_x limit during startup and shutdown will not result in a net increase in emissions because the 115 ppm limit will be replaced by lb/hour limits during startup and shutdown. As indicated by the table above, the new limits are more stringent on a lb/hour basis than the 115 ppm limit with respect to each of the two facilities that is currently regulated under Rule 233. The new limits will not result in a net decrease in emissions, since the limits are already in the facilities' permits.

Rule Evaluation Criteria

We have primarily used the following three criteria to evaluate Rule 233:

1. **Rule Stringency** – Section 172(c)(1) of the Clean Air Act (CAA) requires nonattainment areas to implement all reasonably available control measures (RACM), including such reductions in emissions from existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available control technology (RACT), as expeditiously as practicable. In addition, ozone nonattainment areas classified as moderate or above must require RACT for all major sources of NO_x. CAA § 182(b)(2) & (f); 40 CFR § 51.912(a). The PCAPCD regulates an ozone nonattainment area that is classified as Severe-15 under both the 1-hr ozone and 8-hr ozone standards. 40 C.F.R. § 81.305 (2010).² Therefore, submitted Rule 233 must fulfill RACT requirements for NO_x.
2. **Enforceability** – CAA section 110(a)(2)(A) requires that regulations submitted to EPA for approval into a State Implementation Plan (SIP) must be clear and legally enforceable.
3. **SIP Revisions** - CAA section 110(l) prohibits EPA from approving any SIP revision that would interfere with any applicable requirement concerning attainment and reasonable further progress (RFP) or any other applicable requirement of the CAA. In addition, CAA section 193 prohibits the modification of any SIP-approved control requirement in effect before November 15, 1990, in a nonattainment area.

Guidance and policy documents that we used to define specific enforceability, RACT and RACM requirements include the following:

- *Issues Relating to VOC Regulation, Cutpoints, Deficiencies, and Deviations* (the "Blue Book"), US EPA, OAQPS (May 25, 1988).

² PCAPCD also regulates a nonattainment area under the 2006 24-Hour PM_{2.5} National Ambient Air Quality Standard (NAAQS). 40 C.F.R. § 81.305 (2010). By December 14, 2012, California must submit a revision to the State Implementation Plan (SIP) for this nonattainment area that provides for, among other things, implementation of all RACM as expeditiously as practicable (including RACT for existing sources). CAA § 172(a)(2)(A), (b) & (c)(1), 74 FR 58689 (Nov. 13, 2009). EPA will take action on this RACM demonstration in a separate rulemaking.

- *Guidance Document for Correcting Common VOC and Other Rule Deficiencies*, EPA Region IX (August 21, 2001, the "Little Bluebook").
- *State Implementation Plans; General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990*, 57 FR 13498 (April 16, 1992); 57 FR 18070 (April 28, 1992).
- *State Implementation Plans; Nitrogen Oxides Supplement to the General Preamble; Clean Air Act Amendments of 1990 Implementation of Title I; Proposed Rule*, 57 FR 55620 (Nov. 25, 1992).
- *Final Rule To Implement the 8-Hour Ozone NAAQS – Phase 2*, 70 FR 71612 (Nov. 25, 2005).
- *Determination of Reasonably Available Control Technology and Best Available Retrofit Control Technology for Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters*, CARB (July 18, 1991).
<http://www.arb.ca.gov/ractbarc/boilers.pdf>
- *Alternative Control Techniques Document-- NOx Emissions from Industrial/Commercial/Institutional (ICI) Boilers*, US EPA 453/R-94-022 (March 1994).
<http://nepis.epa.gov/EPA/html/Pubs/pubtitleOAR.htm>
- *Alternative Control Techniques Document-- NOx Emissions from Utility Boilers*, US EPA 452/R-93-008 (March 1994). <http://nepis.epa.gov/EPA/html/Pubs/pubtitleOAR.htm>
- *State Implementation Plans (SIPs): Policy Regarding Excess Emissions During Malfunctions, Startup and Shutdown* from Steven A. Herman, Assistant Administrator for Enforcement and Compliance Assurance, and Robert Perciasepe, Assistant Administrator for Air and Radiation, September 20, 1999.

Evaluation of Rule Stringency

As noted above, submitted Rule 233 must fulfill RACT requirements for NO_x. See CAA § 182(b)(2) and (f); 40 CFR 51.912(a). EPA issues two types of guidance to assist states in determining what control techniques meet the RACT requirement: control techniques guidelines (CTGs) and alternative control techniques (ACTs). CTGs establish the presumptive level of control meeting RACT, whereas ACTs describe available control techniques and their cost effectiveness, but do not define presumptive RACT levels. 70 FR 71654 (Nov. 25, 2005). EPA has not issued a CTG for NO_x for boilers, but in 1994 EPA issued an ACT Document for NO_x emissions from Industrial/Commercial/Institutional Boilers (1994 ACT).

As part of our evaluation of Rule 233, we reviewed the 1994 ACT, which identifies NO_x emission levels for biomass-fueled boilers ranging from 24 ppm to 187 ppm at 3% O₂, based on the use of SNCR controls with ammonia or urea injection. 1994 ACT at Appendix B, pages B20-B21. This translates to a range of approximately 18 to 142 ppm at 12% CO₂. This wide range of emission levels reflects the broad technical diversity among the types of boilers that fire biomass as fuel, including stokers, circulating fluidized bed boilers and bubbling fluidized bed boilers. It also reflects the variety of fuels that the term "biomass" covers, including various kinds of plant materials, wood materials and agricultural wastes.

In addition to reviewing the 1994 ACT, we obtained information about NO_x emission limits in permits for biomass-fueled boilers from the RACT/BACT/LAER Clearinghouse (RBLC, <http://cfpub.epa.gov/RBLC/>). We searched the RBLC for permits dated between 2001 and 2011

with process utility code 11.120 (Utility and Large Industrial Size Boilers/Furnaces (>250 MMBtu/hr), Biomass). The NO_x emission limits in these permits range between 0.01 lb/MMBtu (RBLC ID = GA-0132, issued 2008) to 0.6 lb/MMBtu (RBLC ID = NH-0013, issued 2004), both for a 30 day rolling averaging period. These limits translate to a range of approximately 5 to 328 ppm at 12% CO₂. According to the RBLC, the 5 ppm limit has not been verified. The only permit found in the RBLC with a limit with a 3-hour averaging period similar to limit in Rule 233 is a limit of 0.3 lb/MMBtu, or approximately 164 ppm at 12% CO₂ (RBLC ID = AL-0250, issued 2010).

We also reviewed rules from other air districts in California that regulate biomass boilers. Yolo-Solano Air Quality Management District adopted a Biomass Boiler Rule (Rule 2.43) on November 10, 2010 that limits NO_x emissions to 90 ppm corrected to 3% O₂ on a 24-hour block average. This is approximately equal to 68 ppm at 12% CO₂. San Joaquin Valley Unified Air Pollution Control District's (SJVUAPCD) Solid Fuel Fired Boiler Rule (Rule 4352, adopted May 18, 2006) has a NO_x emission limit for biomass boilers of 115 ppm at 3% O₂ on a 24-hour block average, which translates to approximately 87 ppm at 12% CO₂. We recently finalized a limited disapproval of SJVUAPCD rule because we determined that SJVUAPCD had not adequately demonstrated that the NO_x limits in the rule satisfied RACT.

Finally, we reviewed source test results for the only two currently existing facilities in Placer County that are subject to Rule 233. Source test results for both facilities for 2009 are shown in the following table.

Facility	Boiler	Emission
Sierra Pacific Industries, Lincoln	289 MMBtu/hr, stoker	51.2 ppm at 12% CO ₂
Rio Bravo Rocklin	356.8 MMBtu/hr, CFB	37.6 ppm at 12% CO ₂

The source test results establish the emission levels that the facilities have been able to achieve in practice.

The NO_x emission limit in submitted Rule 233 is 115 ppm at 12% CO₂ for a rolling 3-hour averaging period. This limit, which has been in place since the rule was first adopted in 1994, falls in the middle to high end of the range of achievable emission levels for biomass-fired boilers shown in the 1994 ACT (approximately 18 to 142 ppm at 12% CO₂) and near the middle of the range of limits in recent permits for this source category (approximately 5 to 328 ppm at 12% CO₂). The limit is less stringent than those found in the analogous rules of other air districts in California. In addition, source test data show that the existing biomass-fired boilers in Placer County that are subject to Rule 233 are achieving emission levels significantly below 115 ppm at 12% CO₂. EPA is not aware of any information indicating that these lower emission levels are not reasonably achievable in Placer County.

Thus, although EPA previously approved Rule 233 as RACT for this source category under the 1-hour ozone NAAQS, 61 FR 18959 (April 30, 1996), new information indicates that the previous RACT determination is no longer appropriate. *See* 70 FR 71652. We therefore propose to determine that the PCAPCD has not adequately demonstrated that the NO_x limit in Rule 233 (115 ppm at 12% CO₂) represents RACT.

Evaluation of Enforceability and SIP Revision Criteria

Recordkeeping and other compliance provisions in the rule ensure that the requirements are adequately enforceable. The amendment of the Rule addresses EPA concern regarding the start-up and shutdown provisions and aligns these provisions with EPA guidance on the matter.

The submitted rule eliminates the less stringent NOx emission limit option and adds a more stringent emission limit for CO than the version previously approved into the SIP. As shown in the "Changes to the Rule" section above, the new limits for start-up and shutdown periods are more stringent than the existing limits for each of the facilities currently subject to the rule. Therefore, we propose to determine that a limited approval of the submittal would comply with CAA section 110(l) because (1) the proposed SIP revision would not interfere with the on-going process for ensuring that requirements for RFP and attainment of the NAAQS are met, and (2) the submitted SIP revision is more stringent than the rule previously approved into the SIP. We also propose to determine that a limited approval of the submittal would comply with CAA section 193 because the submitted SIP revision is more stringent than the rule previously approved into the SIP and would insure equivalent or greater emission reductions of NOx and CO.

Rule Deficiency

As explained above under Evaluation of Rule Stringency, we believe that PCAPCD has not demonstrated that the NOx emission limits for biomass boilers implement RACT and that the NOx emission limits should be lowered to ensure implementation of RACT. Alternatively, PCAPCD may submit additional information to demonstrate that lower emission limits are not reasonably achievable.

Recommendation

EPA staff recommends a limited approval and limited disapproval of PCAPCD Rule 233 under CAA sections 110(k)(3) and 301(a).

Other References

1. RBLC permit information (AL-0250, GA-0132, NH-0013)
2. Source test results for Sierra Pacific Industries, Lincoln, 2009
3. Source test results for Rio Bravo Rocklin, 2009
4. Email from John Finnell to Idalia Perez on 4/8/2011
5. Submitted Rule 233
6. Staff Report for Rule 233
7. Current SIP-approved version of Rule 233

ATTACHMENT #3

SUBJECT:

Calculations of % Oxygen vs. % Carbon Dioxide

District Calculations

Comparing Theoretical Values at 3% O2 vs. 12% CO2 Using F Factors

$$F_o = (20.9 - \%O_2) / \%CO_2$$

$$F_o = 0.209 F_d / F_c$$

$$F_d = 9240 \quad \text{Wood}$$

$$F_c = 1830 \quad \text{Wood}$$

(Above F factors from EPA Method 19)

$$\text{If } \%CO_2 = 12$$

$$F_o = (20.9 - \%O_2) / \%CO_2 = (20.9 - \%O_2) / 12 = .209 * 9,240 / 1,830$$

$$F_o = (20.9 - \%O_2) = 12 * .209 * 9,240 / 1830 = 12.663$$

Solving for O2

$$\%O_2 = 8.2367$$

$$NO_x @ 3\% O_2 = (20.9\% - 3\%) / (20.9 - \%O_2) \times NO_x \text{ at } 12\% CO_2$$

$$NO_x @ 3\% O_2 = 1.4135 \times NO_x \text{ at } 12\% CO_2$$

$$90 @ 3\% = 64 @ 12\% CO_2$$

(approximately)

Apparently, EPA used a F Factors other than the ones
in the above equations and solved for O2

$$\%O_2 = 7.38$$

$$NO_x @ 3\% O_2 = (20.95\% - 3\%) / (20.95 - \%O_2) \times NO_x \text{ at } 12\% CO_2$$

$$NO_x @ 3\% O_2 = 1.3228 \times NO_x \text{ at } 12\% CO_2$$

$$90 @ 3\% O_2 = 68 @ 12\% CO_2$$

Yolo-Solano's staff report indicated that a typical biomass boiler ran at
7 % O2 which they calculated as equivalent to 70 ppmv at 12% CO2.